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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-71* is/are pending in the application.

   4a) Of the above claim(s) *46 – 59 and 62 – 71* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45, 60 and 61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 August 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☒ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date *2/3/05*.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

1   **DETAILED ACTION**

2

3

4   Claims 1 – 71 are pending.

5   Claims 46 – 59 and 62 – 71 are withdrawn from consideration.

6

7   *Election/Restrictions*

8

9   Applicant's election of claim 1 – 45 and 61 in the reply filed on 4/19/2007 is

10   acknowledged. Because applicant did not distinctly and specifically point out the

11   supposed errors in the restriction requirement, the election has been treated as an

12   election without traverse (MPEP § 818.03(a)).

13

14   *Drawings*

15

16   Figures 1 – 3 should be designated by a legend such as --Prior Art-- because

17   only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

18   compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

19   abandonment of the application. The replacement sheet(s) should be labeled

20   "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

21   any portion of the drawing figures. If the changes are not accepted by the examiner, the

1   applicant will be notified and informed of any required corrective action in the next Office

2   action. The objection to the drawings will not be held in abeyance.

3

4   *Claim Rejections - 35 USC § 102*

5

6   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

7   form the basis for the rejections under this section made in this Office action:

8   A person shall be entitled to a patent unless –

9   (e) the invention was described in (1) an application for patent, published under section 122(b), by
10   another filed in the United States before the invention by the applicant for patent or (2) a patent
11   granted on an application for patent by another filed in the United States before the invention by the
12   applicant for patent, except that an international application filed under the treaty defined in section
13   351(a) shall have the effects for purposes of this subsection of an application filed in the United States
14   only if the international application designated the United States and was published under Article 21(2)
15   of such treaty in the English language.
16
17   **Claims 1, 2, 5, 6, 8, 12 – 15, 17 – 22, 45, and 61 are rejected under 35**

18   **U.S.C. 102(e) as being anticipated by Aziz et al. (Aziz), "Method and Apparatus for**

19   **Providing Secure Communication with a Relay in a Network", U.S. Patent**

20   **6,643,701.**

21

22   Regarding claim 1, Aziz discloses:

23   *a first node; a second node and; at least one intermediate node between said*

24   *first and second nodes; wherein said first and second nodes are arranged to be in*

25   *communication and said first and second nodes have a first security association and*

26   *one of said at least one intermediate node and said second node have a second*

27   *security association (fig. 2:210, 230); and wherein said first security association*

1   *authenticates said second node to said first node and said second security association*

2   *authenticates said at least one intermediate node to said second node* (1:64-2:2; claim

3   3).

4

5   Regarding claim 2, Aziz discloses:

6   *wherein at least one of said first and second security association comprise*

7   *presenting at least one certificate to a respective one of said nodes for authentication*

8   (claim 3; 5:1-22).

9

10   Regarding claim 5, Aziz discloses:

11   *wherein said at least one intermediate node inspects information sent between*

12   *said first and second nodes* (9:31-39).

13

14   Regarding claim 6, Aziz discloses:

15   *wherein said at least one of intermediate nodes modifies information sent*

16   *between said first and second nodes* (9:31-39).

17

18   Regarding claim 8, Aziz discloses:

19   *wherein said first node is attached to a packet switched network* (Abstract).

20

21   Regarding claim 12, Aziz discloses:

22   *wherein said first node comprises a client device* (Abstract).

Regarding claim 13, Aziz discloses:

wherein at least one of said first and second security association comprises

encryption (claim 3; 5:1-22).

Regarding claim 14, Aziz discloses:

wherein said one of said at least one said intermediate node is configured to

pass data packets from at least one of said first node to at least one of said second

node and from at least one of said second node to at least one of said first node (fig. 2,

6).

Regarding claim 15, Aziz discloses:

wherein said at least one intermediate node is arranged in a network gateway

node (fig. 2, 6; 9:31-39 – Aziz discloses the node in the form of a network gateway and

thus a "node arranged in a network gateway").

Regarding claims 17 – 20, Aziz discloses:

wherein said second node is connected to said gateway node; wherein said

client device comprises a computer, user equipment, mobile station, or personal digital

assistant; wherein said second node comprises a serve; wherein said second node is

configured to provide a service to said first node (fig. 2; col. 7).

1   Regarding claims 21 and 22, Aziz discloses:

2   *wherein the first node is configured to send a first connection message to the second*

3   *node; wherein said first connection message comprises a Transmission Control*

4   *Protocol connection message (6:11-26; 7:24-67).*

5

6   Regarding claim 45, Aziz discloses:

7   *wherein said second security association is established before said first security*

8   *association (5:1-22,34-41).*

9

10   Regarding claim 61, Aziz discloses:

11   *wherein said first node comprises an Secure Socket Layer Client node (fig. 2).*

12

13   ***Claim Rejections - 35 USC § 103***

14

15   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

16 obviousness rejections set forth in this Office action:

17   (a) A patent may not be obtained though the invention is not identically disclosed or described as set
18   forth in section 102 of this title, if the differences between the subject matter sought to be patented and
19   the prior art are such that the subject matter as a whole would have been obvious at the time the
20   invention was made to a person having ordinary skill in the art to which said subject matter pertains.
21   Patentability shall not be negatived by the manner in which the invention was made.
22
23   **Claims 7, 9 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable**

24 **over Aziz.**

25

1   Regarding claims 7, 10, and 11, Aziz discloses that the plurality of client nodes

2   are wireless communication devices (i.e. cell phones - 7:4-18), however, Aziz does not

3   explicitly state that the wireless communication devices are "attached to a wireless

4   network". However, the notion of a wireless communication device as attached to a

5   wireless network would have been obvious to one of ordinary skill in the art. This would

6   have been obvious to one of ordinary skill because it was both well known in the art for

7   wireless devices to be attached to wireless networks and easily within the rational

8   sensibility of one of ordinary skill to recognize that wireless communication devices

9   communicate wirelessly ("a wireless network").

10

11   Regarding claim 9, it is rejected, at least, for the same reasons as claim 7, and

12 furthermore because it was well known to those of ordinary skill in the art for cellular

13 networks to operate within a GPRS standard.

14

15   **Claims 3, 4, 23 – 43, and 60 are rejected under 35 U.S.C. 103(a) as being**

16 **unpatentable over Aziz in view of Dierke et al. (Dierke), "The TLS Protocol", RFC**

17 **2246.**

18

19   Regarding claims 3 and 4, Aziz states the use of certificates according to the

20 SSL or TLS standard protocol. However, Aziz does not explicitly state that the

21 certificate is a *cryptographic certificate*. Dierke however discloses that the certificates

22 used within the TSL protocol comprise X.509 certificates (Dierke, pg. 23). It would have

1   been obvious to recognize the teachings of Dierke within the system of Aziz, as one of

2   ordinary skill in the art would have been motivated to operate according to the disclosed

3   standard of TLS.

4

5   Regarding claims 23 and 24, Aziz states the use of the SSL or TLS standard

6   protocols. However, Aziz does not explicitly state each and every technical detail of the

7   SSL or TLS protocol. Dierke however discloses the technical details of the TLS

8   protocol, including details regarding session establishment (Dierke, pg. 2). It would

9   have been obvious to recognize the teachings of Dierke within the system of Aziz, as

10   one of ordinary skill in the art would have been motivated to operate according to the

11   disclosed standard of TLS.

12   Thus the combination enables:

13   *wherein the first node is configured to send a hello message to the at least one*

14   *intermediate node; wherein said hello message comprises a Secure Socket Layer*

15   *protocol handshake message* (Dierke, pgs. 32-36).

16

17   Regarding claims 25 – 26, the combination enables:

18   *wherein the at least one intermediate node is configured to make a copy of at*

19   *least a part of said hello message, wherein said at least one intermediate node is*

20   *configured to send said hello message to the second node* (4:45-59).

21

1   Regarding claim 27, it is rejected, at least, for the same reasons as claim 23 and

2   24. Thus, the combination enables *wherein the second node is configured to send a*

3   *hello message to the said at least one intermediate node* (Dierke, pgs. 32-36).

4

5   Regarding claims 28 – 34, the combination enables:

6   *wherein said at least one intermediate node is configured to send a handshake*

7   *message to the second node in response to receiving said hello message from said*

8   *second node, wherein said second node is configured to respond to said handshake*

9   *message, wherein said response comprises a Secure Socket Layer protocol handshake*

10   *message, wherein said handshake message sent to the second node comprises a*

11   *Secure Socket Layer protocol handshake message, wherein said handshake messages*

12   *are configured to create said second security association, wherein said handshake*

13   *message sent by said one of said at least one intermediate node comprises a client*

14   *certificate, wherein said one of said at least one intermediate node is configured to*

15   *create said client certificate when requested* (Dierke, pgs. 32-36).

16

17   Regarding claim 35, the combination enables:

18   *wherein said one of said at least one intermediate node is configured to retrieve*

19   *said client certificate from a storage device* (Aziz, 5:1-22).

20

21   Regarding claims 36 – 38, the combination enables:

1   *wherein said at least one intermediate node and said second node are*

2   *configured to generate at least one key to encrypt information sent between said at*

3   *least one node and said second node, said at least one key being used in said second*

4   *security association and wherein said first node and said second node are configured to*

5   *generate at least one key to encrypt information sent there between said first node and*

6   *said second node, said at least one key being used in said first security association*

7   *wherein said at least one intermediate node is configured to create said at least one*

8   *key only when requested* (Dierke, pgs. 32-36; Aziz, 2:36-59).

9

10   Regarding claims 39 and 40, the combination enables:

11   *wherein said at least one intermediate node is configured to retrieve said at least*

12   *one key from a storage device, wherein said at least one key is configured to be*

13   *dependent on a client certificate* (Dierke, pgs. 32-36; Aziz, 2:36-59, 5:1-22).

14

15   Regarding claims 41 and 42, the combination enables:

16   *wherein at least one said client certificate certifies a known node which is known*

17   *to said at least one intermediate node, wherein said client certificate certifies a holder of*

18   *a specified resource* (Dierke, pgs. 32-36; Aziz, 2:36-59, 5:1-22; 6:12-27, 7:4-18).

19

20   Regarding claim 43, the combination does not explicitly state that a cellular

21   telephone comprises *one of an International Mobile Station Identity telephone number*

22   *and a Mobile Station Integrated Service Digital Network telephone number.* However, it

1   was well known to those of ordinary skill in the art for a cellular telephone to comprise

2   such a telephone number. This would have been obvious to one of ordinary skill in the

3   art because such numbers allow cellular telephones to communicate within a network.

4

5   Regarding claim 60, the combination enables:

6   *wherein said second security association is based on data within said hello*

7   *message sent from said second node* (Dierke, pgs. 32-36).

8

9   **Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz**

10   **in view of Immonen et al. (Immonen), "Method and System for Conducting**

11   **Wireless Payments", U.S. Patent Publication 2002/0077993.**

12

13   Regarding claim 16, Aziz discloses a gateway that serves to translate

14   communications between a client and server. Aziz discloses aspects related to the

15   security of communications via the Internet, such as electronic shopping transactions

16   performed between a mobile client (i.e. cell phone) and a merchant (i.e. e-commerce

17   merchant) (Aziz, 1:40-63; 4:45-59; 7:4-17). Aziz does not explicitly state that the

18   gateway can operate according to GPRS. Immonen discloses that gateways

19   advantageously operate according to the WAP protocol, including providing support for

20   GPRS, so as to facilitate the communications between a mobile client and a server

21   (Immonen, par. 2-7). It would have been obvious to one of ordinary skill in the art to

22   recognize the teachings of Immonen for a gateway operating as a GPRS support node.

1   This would have been obvious because one of ordinary skill in the art would have been

2   motivated to facilitate the communications between mobile clients and servers.

3

4   **Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over the**

5   **combination of Aziz and Dierke in view of Immonen et al. (Immonen), "Method**

6   **and System for Conducting Wireless Payments", U.S. Patent Publication**

7   **2002/0077993.**

8

9   Regarding claim 44, the combination of Aziz and Dierke discloses that

10   authenticated mobile clients may purchase or use services from servers. The

11   combination, however, does not disclose all details specific to electronic commerce.

12   Specifically, the combination does not explicitly state that *at least one said client*

13   *certificate authorizes said second node to charge said holder of said specified resource*

14   *for services used or purchased.* Immonen discloses that a client certificate authorizes

15   said second node to charge said holder of said specified resource for services used or

16   purchased (Immonen, par. 60). It would have been obvious to one of ordinary skill in

17   the art to recognize the electronic commerce teachings of Immonen within the

18   combination of Aziz and Dierke. This would have been obvious because one of

19   ordinary skill in the art would have been motivated to incorporate in practice features of

20   electronic commerce so as to allow a mobile client to purchase or use services.

21

22

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

A shortened statutory period for reply is set to expire **3** months (not less than 90 days) from the mailing date of this communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery Williams whose telephone number is (571) 272-7965. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

1   Information regarding the status of an application may be obtained from the

2   Patent Application Information Retrieval (PAIR) system. Status information for

3   published applications may be obtained from either Private PAIR or Public PAIR.

4   Status information for unpublished applications is available through Private PAIR only.

5   For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

6   you have questions on access to the Private PAIR system, contact the Electronic

7   Business Center (EBC) at 866-217-9197 (toll-free).

8

9
10   J. Williams
11   AU: 2137
12
13

14   EMMANUEL L. MOISE
                                  SUPERVISORY PATENT EXAMINER

15